NEW ENGLAND FARMER,

AND HORTICULTURAL REGISTER.

PUBLISHED BY JOSEPH BRECK & CO., NO. 52 NORTH MARKET STREET, (AGRICULTURAL WAREHOUSE.)

VOL. XVIII.] BOSTON, WEDNESDAY EVENING, FEBRUARY 5, 1840. [NO. 31.

AGRICULTURAL.

From the Journal of the English Agricultural Society.

ON THE DEANSTON FREQUENT DRAIN SYSTEM,

As distinguished from and compared with the Furrow Draining and Deep Ploughing of the Midland Counties of England. By the Right Hon. Sir JAMES GRAHAM.

SIR—A recent inquiry addressed to me by Lord Spencer, relative to the "Deanston frequent Drain System," induces me to believe that I may render some service to agriculture, if I am so fortunate as to direct the attention of your readers to this important subject at this particular time.

The great object of our quarterly publication is, as I conceive, the establishment of an authentic record of practical experiments; and by multiplying facts and proofs of this description agriculture will be treated as a science, and will advance, and the Transactions of our Society will become the depository of useful information, verified by the name and the address of the several correspondents.

Mr Smith, of Deanston, in the county of Perth, was examined as a witness before the Agricultural Committee in 1836. He gave a detailed account of his system of draining, which very much resembles the furrow-draining of the midland counties of England, except that at Deanston, stone being on the ground, the drains are made with stones and not with tiles; and at Deanston the cover of the drain is 22 inches below the surface; whereas in Leicestershire and Northamptonshire the top of the tile in the furrow is not so deeply laid. Mr Smith, when his land is effectually drained, lays it down without a furrow; in the midland counties the furrow is carefully preserved.

Mr Smith, after draining, for the first rotation at least, does not bring to the surface any of the subsoil; but by a plough of his own invention, which follows a common plough turning up the surface, he penetrates the subsoil to the depth of 20 inches, and breaks and pulverizes the lower crust without bringing it to the top. This subsoil plough, such as Mr Smith has used, is a heavy implement, requiring the draught of four, six or eight horses, according to the tenacity and strength of the substratum.

Mr Smith contends that the subsoil, by being moved, becomes pervious both to air and moisture; that the efficacy of the drains is thus perfected and perpetuated; and that the character of the subsoil itself, when relieved from superfluous moisture, and open to atmospheric influence, is entirely changed; that it becomes mellow and friable; and after one rotation, or a lapse of five years, that it may be brought to the top, by deep ploughing, with safety and propriety, and be mixed with the surface-soil to great advantage.

In the midland counties of England, deep ploughing after furrow-draining has been the constant practice; but the use of six horses in a subsoil plough is a novelty in Scotland. In England a portion of the subsoil is raised at once to the top: at Deanston the subsoil, though broken, is not so raised; and here the important question arises, When land is effectually underdrained, which is the right treatment of the subsoil? Will you bring a portion of it immediately to the surface by deep ploughing, or will you, with Mr Smith, delay this operation for some years, until the subsoil shall have been mellowed, after having been broken and penetrated by the atmosphere?

The advantages of the wide circulation of agricultural knowledge, of the multiplication of experiments, and of the interchange both of theory and practice between Scotland and England, will here develope themselves in the clearest light. Furrow-draining and deep ploughing have been practised in England for half a century; yet the introduction of an analogous system into Scotland is regarded almost as a discovery. But in Scotland itself the greatest difference of opinion prevails on the question of turning up or only moving the subsoil after draining. Some of the greatest authorities in East Lothian differ from Mr Smith, and lean to the English practice. In the first furrow for green crop after draining, by two ploughs following each other, which is equivalent to trench-ploughing, they go down to the depth of 12 or 14 inches, and bring up a certain quantity of virgin soil.

It is obvious that this difference of practice in the treatment of the subsoil involves a most important question, which can only be solved by accurate and multiplied experiments. The outlay of capital, which is common to both plans, consists in effectual underdraining; and no subsequent management, no fresh application of capital, can be of any avail, unless, on retentive soils or a substratum of clay, the water be quickly carried off. This I take to be an axiom undisputed in agriculture: but after effectual draining, when the outlay has been incurred, the mode of treating the subsoil affects only production, and does not involve expenditure; and greater produce without additional outlay is the grand object of the practical farmer.

We have seen that in draining, Mr Smith uses stones, because he has them on the spot. Tiles are substituted in the midland counties of England because stones cannot be obtained easily, and because in the clay districts tiles are cheaply and easily manufactured.

It has always appeared to me that skill in agriculture does not so much consist in the discovery of principles of universal application, as in the adaptation of acknowledged principles to local circumstances.

The peculiarities of soil and climate, what nature gives or nature withholds in each particular district, must be carefully considered and judiciously investigated, before any given experiment, though locally successful, can be pronounced to be generally useful or universally applicable. The neglect of this consideration has brought agricultural experiments into disrepute, on account of the heavy losses which they have occasioned. If the record now opened in these Transactions be faithfully kept, this evil will be averted; for I hope that each experiment detailed will be authenticated by the name of the party who makes it, and that every local circumstance of a peculiar character will be carefully particularised.

My attention having been thus directed to the various treatment of subsoils after under-draining, I tried an experiment in the year 1838, on a field of about 8 acres of the poorest and wettest land. The surface-soil is about 5 inches deep, of black earth of a peaty quality: the subsoil is a weeping retentive clay with sand and rusty gravel intermixed. This clay goes down to the bottom of the drains, which are of tile, laid 30 inches deep, in every furrow.* This field is in a farm lately taken into my own hands, and was rented by the out-going tenant at 4*s.* 6*d.* an acre. It was in pasture of the coarsest description, overrun with rushes and other aquatic plants.

After draining, on one-half of this field I used Mr Smith's subsoil plough; on the other half I trench-ploughed to the depth of 10 inches by two ploughs following in succession: in the first part not mixing with the surface any of the subsoil; in the last part commingling the surface and the subsoil in nearly equal proportions. The whole field was heavily but equally manured and planted with potatoes; and though the potato crop, even on good land, in this neighborhood, was below an average, yet the crop in this field exceeded an average, and yielded about twelve tons per acre. The field is equally drained in every part. I filled up the tile drains with porous materials, such as stones, moor-turf reversed, and tops of thinnings of young plantations, to the exclusion of the retentive clay which held the water. The crop of potatoes was so equal throughout the field, that I am unable to pronounce positively which part was the best; but I am inclined to give the preference to that portion where Mr Smith's subsoil-plough was used. Since the potatoes were taken up, the land has not been ploughed or ridged up, but remains perfectly flat; and I observe, where Mr Smith's subsoil plough was used, that no water whatever, notwithstanding the wetness of the season, has stood upon the land; where trench-ploughing was adopted, and a portion of the clay brought to the surface, after heavy falls of rain the water has stood for a time in hollow places; and here the land, in consequence, would seem to be rather soured. The field will be sown out this spring with oats and grass-seeds, and I shall watch with anxiety the future effect of the past different treatment.

In the mean time I have relet the farm: the outlay in draining and extra ploughing cost me £6 18*s.* 4*d.* an acre;† but the field in question, which was

*The size of the tiles used was 6 inches for the main drains, and 3 inches for the common drains. The tile drains were laid 10 yards apart.

	£.	s.	d.
170 roods of draining, cutting, laying the tiles and upfilling at 4d. per rood,	1	3	4
1500 tiles per acre, at 30s. per thousand	2	5	0
Carriage of do. 6s. do.	0	9	0
Do. of turf, &c., for covering the tiles, 70			

valued at 4*s.* 6*d.* an acre to the out-going tenant, is rented by the in-coming tenant at 20*s.* an acre on a lease of 14 years.

On a small field of very retentive clay, of an hungry and bastard kind, intermixed with rusty gravel, I tried six years ago the experiment of trenching with the spade after close and careful draining; I buried the surface soil, which was poor and exhausted, and I brought the subsoil to the top from the depth of 18 inches. I limed this land and sowed it out with rape and grass seeds. It has been very unproductive ever since, and all my expenditure upon it hitherto, has been thrown away; for, though dry, it bears no more grass than before the draining. I think, however, that the surface-soil is now mellowed by exposure to the atmosphere; and I am about to break up this field and to put it through a rotation, in the confident hope of increased production. I have also ordered a field of 20 acres of dry and good land, cropped out by a bad tenant, to be treated with a view to this experiment on subsoils. The field lies in two ridges on the bank of the river Esk: the soil is alluvial deposit: on the lower ridge next to the river the surface is a fine loam of 12 inches deep, incumbent on a subsoil of sandy loam 16 inches deep.—On the upper ridge the loam does not exceed 8 inches, but the subsoil is a good clay 13 inches deep; in the hands of tenants up to the present time, the depth of the furrow ploughed has never exceeded 6 inches. I have ordered the lower flat to be trench-ploughed to the depth of 14 inches, bringing the virgin loam to the top; I have ordered the upper flat to be stirred with Mr Smith's subsoil plough, thus breaking the lower crust without changing the surface. The whole is to be manured equally with bone-dust, and a crop of turnips is to be taken.

I shall be happy, at a future time, to communicate the comparative result of this different treatment; and I trust I may be pardoned for my present intrusion, which arises from my anxiety to fix the attention of the farmer on this question of the treatment of subsoil, which by judicious management, I think, may add to the power of production without cost; especially when the surface by long and repeated cropping has been exhausted and has become comparatively sterile. At the commencement of our publication I could not omit an opportunity of endeavoring to use it for the legitimate purpose of inviting accurate experiment, with the view of circulating and extending agricultural knowledge.

I have the honor to be, sir,
Your faithful servant,
J. R. G. GRAHAM.

Netherby, 26th January, 1839.

EDUCATION.—I have ever thought the prohibition of the means of improving our rational nature, to be the worst species of tyranny that the insolence and perverseness of mankind ever dared to exercise. This goes to all men in all situations, to whom education can be denied.—*Lavater.*

---

roods, and cutting do., at 6d. per rood, gives per acre	1	15	0
	5	12	4
Ploughing with the Deanston plough, with 4 horses	1	6	0
	£6	18	4

From the Albany Cultivator.

EXPERIMENT WITH POTATOES.

MESSRS EDITORS—Farmers are generally aware that the potato is not produced on the proper roots of the plant, or those devoted to nutrition, but on side shoots from the main stem, above the roots proper, and nearer the surface of the earth. It has been stated that De Candolle, taking the hint from this production of the tubers, and conceiving that the shoots still farther from the roots on the main stem if covered with earth, would furnish tubers instead of leaves, actually succeeded in growing them, for considerable distances on the main stems, by repeated coverings of them with earth.—A writer on vegetable physiology, in the Farmer's Register, basing his opinions, it is presumed, on this peculiar law of the plant, recommended the following method as probably the best for the cultivation of that root:

"Let the ground be prepared in the usual way; lay the potatoes in the bottom of the furrow, and cover them to the depth of three or four inches with coarse manure or leaves, and then with two or three inches of earth. After the stalks are six or eight inches above ground, cover all except their ends in the same manner; and perhaps this process may be advantageously repeated a third time; after which they should be suffered to go to seed. The first covering should, unless the land be very rich, consist in part of manure, in order to furnish nourishment to the plant; the second and third may consist of straw or leaves, as the principal object is to keep the earth loose, and protect the tubers from the action of the sun."

In order to test the correctness or fallacy of these opinions, I determined last spring to partially repeat the experiments of De Candolle, and selected for the purpose two hills on my bed of early potatoes in the garden. The ground was highly manured, having the last year been occupied by a mound of manure, on which cucumbers and melons were grown. This was thoroughly incorporated with the garden mould by ploughing, and in this potatoes of the common early variety were planted in hills at the distance of about three feet. Taking a barrel, I sawed it in two in the middle, and placed one half over each hill of potatoes, sinking the rim some two or three inches in the earth; the heads of the barrel of course were out, and the hills were covered in the usual manner by being slightly rounded.

When the plants came up and had attained a height of about ten inches, I filled the half barrels with the same rich mould, merely leaving the tips of the plants in sight. The growth of the plants was most luxuriant, the length of the stems far exceeding those in the same earth near them, and they continued green and flourishing long after the others had ripened and died. At the time of digging, the half barrels were taken away and the earth carefully removed, without disturbing the stems. Not a trace of a tuber was to be found, except on the shoots below the natural surface of the ground, not differing in this respect, in the least from those around them. The shoots that came out above these, from the main stems, showed no disposition to produce tubers, but reaching the surface, rivalled in vigorous growth the original stems. The yield from the hills was a little more than from those around them, owing perhaps to the longer period of their growth, or the greater supply of nutriment afforded by the additional mould.

Whatever may be the cause, my experiment has not resulted as did De Candolle's, in the formation of tubers above the original or first crop, and would seem to add but little force to the arguments used by some in favor of deep hilling, at the second or latest hoeing. A *rich friable earth*, in which the roots find sufficient nutriment, and the tubers enlarge at their pleasure, and a covering of sufficient depth at the first, would seem to be about all that is required, with a clean surface, for the production of the potato. H. M. G.

ROCKY MOUNTAIN FLAX.

We know of no plant which seems to better deserve an effort for its introduction into the class of cultivated vegetation, than the one above named. The common flax plant is an annual; is exposed to the depredations of many insects; to get the full amount of the crop it is necessary it should be pulled, and yet with all these drawbacks, it is a valuable crop, and indispensable for many purposes. If a plant possessing the same valuable qualities as the common flax, yet which would be perennial, and could be cradled or mown at maturity—(thus giving an annual succession of crops from the same root)—could be discovered and brought into use among us, and particularly in the fertile valleys and prairies of the western States, the advantages would certainly be very great. Such a plant is the Flax of the Rocky Mountains; and the individual or the society that shall introduce it into cultivation, should it answer present indications, will be considered as benefitting the agriculture of the country essentially. Of the various notices which we have seen of this plant, we select the following as more particularly describing its appearance, and the extent of its growth in those regions.

Mr Parker, in his excellent narrative of his journey across the Rocky Mountains, from the Mississippi to the Pacific, says, "Flax is a spontaneous production of this country. In every thing, except that it is perennial, it resembles the flax that is cultivated in the United States—the stalk, the bowl, the seed, the blue flower, closed in the day time and open in the evening and morning. The Indians use it in making fishing nets. Fields of this flax might be managed by the husbandman in the same manner as meadows for hay. It would need to be mowed like grass; for the roots are too large and run too deep in the earth, to be pulled as ours is; and an advantage that this would have, is, that there would be a saving of ploughing and sowing." This was on a branch of Lewis or Snake river, of the Columbia.

In a late journal of a passage across these mountains, by Mr Oakley, of Illinois, under date of the 21st of July, 1839, occurs the following: "Encamped to-night in a beautiful valley, called Bayou Selard, 28 miles from the head of the south fork of the Platte. It is a level prairie, thirty miles long and three wide, and was covered with a thick growth of flax, which every year springs up spontaneously."

Whether the Rocky Mountain flax will prove to be as near the common flax as is supposed by Mr Parker, may be doubted; but that it is unlike, and far superior, to the two or three kinds of native wild flax that have before been discovered in the United States, would also seem to be clear. A tract of 90 square miles of flax, such as Mr Oakley described, would be a sight in any country, and would rival the grass covered prairies of Illinois.—*Albany Cultivator.*

MUTUAL IMPROVEMENT—CLUBS.

What, we would ask, is there to forbid farmers' soirees, or conversaziones? or, if such words would be considered too much in the fashionable or boarding school style for the farmer, let the word *club* be substituted, and then we shall have farmers' clubs,—meetings we think both desirable and practicable. Intercourse with each other is what the cultivators of the soil need, to enlarge their views, diffuse information, promote inquiry, and create a feeling of unity of interest and concert of action, so necessary in all communities. It is the contact of mind with mind that brightens the faculties, and elicits light, as the collision of the flint and steel produces the spark and the flame. Horticultural meetings of any kind have a tendency to these good effects; institutes, societies, clubs, all co-operate to the same end, and with different degrees of effectiveness, contribute to the same result.

In England, where the science of agriculture and the means of improving it, are as well understood, to say the least, as in any part of the world, clubs, or neighborhood meetings of farmers for the discussion of agricultural topics, have been found among the most effectual aids the cause of the farmer could receive. That such would be the case in this country, we see little room to doubt; in fact the influence of our county and town societies, furnishes the most conclusive evidence on this point. It may indeed be said that the greater diffusion of agricultural periodicals in this country, renders such meetings less necessary than in the old country, where such papers or books are rare. This may in part be true, but could not these two means of improvement be brought to act together, and thus exert an influence more favorable and more powerful, than both acting singly and detached from each other?

The difficulty in originating and sustaining such clubs, has been found to arise from the want of continued interest in the discussions and the paucity of topics introduced. To do away these objections we propose the following method. Let the members of these neighborhood clubs provide themselves with a number of the best agricultural publications of the country, each one, if he chooses, making his own selection; let these publications be a common stock for the benefit of the members; let meetings be held once a month, at which these publications shall be returned, exchanges made, the various matters found in them discussed, and the practical experience of the members, for or against the several opinions advanced, be made known. We can hardly imagine that in such case the meetings would be uninteresting or uninstructive. At the close of the year, the numbers of each volume could be collected and bound, and ere long an agricultural library for the use of the club would be established of the most valuable kind. Few individuals are found who are able to procure all the journals of this class they would like to read, nor can any one journal embody all the valuable papers and facts that are furnished for the information of the public. In this way an individual can command the reading, and avail himself of the information given in the best farming periodicals of this country or the world, without any extra trouble or expense.

Should any neighborhood of cultivators be disposed to adopt our suggestion, we may be permitted to recommend, after our own Cultivator, the New England Farmer, the Farmer's Monthly Visitor, the Maine Farmer, the Farmer's Cabinet, the Franklin Farmer, the Yankee Farmer, American Farmer, and particularly Ruffin's Farmer's Register, one of the best publications in this or any other country. Of European works, the London Farmer's Magazine is the best.—*Albany Cultivator.*

From the Albany Cultivator.

CULTURE OF INDIAN CORN.

Mr Jesse Buel—As I have been a constant reader of the Cultivator, I often find the inquiry from your different correspondents, respecting the best method of raising a crop of corn. I therefore send you a statement of the soil, management and profit of one acre, planted by me with corn the present season.

The soil, two-thirds of it, was a warm gravel; the other third was low, wet, and covered with rushes and wild grass, with a very tough sod; but I was careful to put two good underdrains through it, which left it a rich black mould. About the 1st of May I drew twentytwo loads of unfermented manure, each load containing thirtyfive bushels, and spread it evenly over the acre. I then ploughed before the manure had time to dry; then dragged lengthways of the furrows; planted the 9th of May with Dutton corn, the hills three feet apart each way, making 4840 hills with six kernels in a hill. It was attacked by the grub as soon as it made its appearance above ground, at which time I spread twelve bushels of unleached ashes upon it, which checked them a little, but they succeeded in destroying 70 hills, leaving only 4770. These were hoed and thinned to four stalks in each hill, June 6th; then I sowed two bushels of plaster upon the hills, and hoed again July 2nd; put no more earth to the hills than was taken away; went through with the cultivator both ways, four times—June 1st and 6th, July 1st and 12th. On the 14th of September I cut up and shocked the corn, and on the 28th finished husking and housing it.

Upon one square rod, of twenty hills and one fourth of a hill, of the best of the low ground, grew seventy pounds of ears, equal to one hundred and fortyeight bushels per acre. The whole product was one hundred and twenty bushels.

Cost of Cultivation.

One day ploughing,	$2 00
Harrowing half a day,	1 00
22 loads of manure,	11 00
Planting, 2 days,	1 50
Seed corn,	50
Hoe and cultivator, 2 days,	2 00
Hoeing, 4 days,	3 00
12 bushels ashes and 2 bushels plaster,	1 70
Spreading ashes and plaster,	1 00
Cutting and shocking,	1 50
Husking and housing, 7 days,	5 25
Carting stalks,	75
Threshing, 3 days,	2 30
Interest on land,	3 50
Total cost,	$37 00

Product.

115 bushels of first rate corn,
Five bushels of second rate,
Stalks, four loads.

WILLIAM INGELL.

Volney, Oswego co., N. Y., Dec. 9, 1839.

I hereby certify, that I am personally acquainted with the above named William Ingell, and believe him to be a person of truth and veracity, and that his statements may be depended on.

R. D. HUBBARD,
Justice of the Peace.

WOOL.

Few are aware of the importance of this article as an item of our productions, or the amount which it already reaches in the sum total of value. Two years since, the number of sheep was estimated at 12,000,000; it is now not less than 15,000,000.—Allowing the estimate of three pounds per head, the clip of 1839 would be fortyfive million pounds of wool. We have been careful observers of the price of wool, and find it has ranged from 40 to 60 cents per pound, some few lots going above as some have fallen below the prices named. To be sure of being within the amount, we will take the average at 45 cents, and at that rate, the last clip of wool would be worth more than twenty millions of dollars. Yet this is but one item in the productive industry of the north.

At the present prices of sheep and wool, the business of growing them is a profitable one, and may we think with safety be calculated upon as a good one for time to come. Wool of good quality could hardly fail to pay as an article of export to England or France, should present prices abroad be maintained, and the supply for home consumption in this country be exceeded.

To prove that growing wool is a good investment of money, we have only to look at the cost, expenses and returns of a flock. A flock of good ewes, with proper management, will hardly fail of doubling their numbers within the year, and if to the sale of the wool the value of the lambs be added, it will be seen after deducting the expenses of keeping, that a handsome profit remains. But to have good sheep, or good wool, more attention must be paid than is usually given. Sheep that get their living by hook or by crook; that are allowed to gather in their fleeces all the burdock and other burweeds that line too many of our roads and fences, and fill our woodlands; that are exposed to all the vicissitudes of our severe and variable climate without shelter, or barely making a living through the winter, cannot be expected to raise many lambs or produce good wool. Wool and silk are to be the great sources of our supply of clothing hereafter, and their importance to the country will be proportioned to their general use.

Ambition.—Do not aspire to things that are beyond your reach, but be satisfied with the present good which you enjoy. If you are actuated by a laudable ambition, let it be to excel in the profession you have chosen, instead of sinking below in some other. It is a common error of mankind, that they will not be persuaded that every calling or business, has its mixture of good and evil. They see the gilding of the object to which they aspire, but not the canker within.

Hope.—What a miserable wretch is he who must survive his hopes! Nothing remains when that day comes, but to sit down and weep like Alexander, when he wanted other worlds to conquer.—*Congreve.*

Potatoes were selling at Baltimore a short time since at $1 per bushel, and scarce at that.

GROWTH OF PLANTS, &c.

Effect of the Change of Season upon Vegetation—Position of the Sap at different seasons—Dry Rot—Method of preventing it—Proper season for Trimming Trees.

A periodical cessation of growth appears to be necessary to the healthy action of most plants, and in this particular we cannot but notice an admirable adaptation of the constitution of plants to those changes of season, which, in some form or another are common to all climates. It is true, that within the tropics, vegetation is not affected by the alternate heat and cold experienced in extra-tropical regions; but yet, very much the same effect is produced upon plants by the change from the rainy to the dry season in those climates, as by that from summer to winter in our own. The effect of the dry season in the one case, and of winter in the other, is not however to produce an entire cessation of all growth; as it appears from experiment that vegetation is at all times more or less active: in the winter it is languid, whilst it is energetic in the spring and summer. The fact that the buds of most plants swell, and that all plants form additions of greater or less extent to their roots during the winter, forbid us to entertain the idea that there is a total cessation of vegetation at that season. But although plants appear to have the power of absorbing fluids by their roots during the winter, they can have but little opportunity of parting with any portion of it again by evaporation, and as a necessary consequence, their tissues become distended and turgid with the sap thus accumulated. This turgidity of the tissues is at its maximum just before the season at which plants put forth their leaves, and is eminently favorable to rapid growth when vegetation resumes its activity. It is a well known fact, that after very long winters, or when a plant has been prevented by artificial means from shooting at its usual season, its branches and leaves are developed with extraordinary rapidity—a circumstance to be ascribed entirely to the accumulation of sap in the tissues.

The diurnal changes from light to darkness appear to be equally important to the well being of plants with the annual changes from summer to winter. If plants were kept incessantly growing in light they would be perpetually decomposing carbonic acid, and would in consequence become so stunted that there could be no such thing as a tree, and this is actually the case in polar regions where the day and night are each of six month's continuance. If on the contrary they grow in constant darkness, their tissues become excessively lengthened and weak, no decomposition of carbonic acid takes place, none of the parts acquire solidity and vigor, and finally they perish. But in ordinary circumstances, plants which in the day become exhausted by the decomposition of carbonic acid, and by the emptying of their tissues by evaporation, repair their forces at night by inhaling oxygen copiously, and so forming a new supply of carbonic acid, and by absorbing moisture from the earth and air without the loss of any portion of it. Such being the case, we must conclude that plants grow chiefly by day, and this is conformable to the few observations which have been made on this subject. Meyer found that the stem of a Belladonna lilly, and plants of wheat and barley, grew about twice as fast by day as by night; and Mulder states that he has arrived at similar conclusions in watching the development of other plants.

When speaking of seeds and underground stems, the fact was mentioned that the nutritive matter which they contain, and which constitutes their value as articles of food, is, in the economy of vegetable life, intended for the sustenance of the young plants to which they give origin, during the early stages of the growth of those plants, and before they have become sufficiently developed to acquire nourishment for themselves. The heart-wood of trees appears to stand in a somewhat similar relation to the young buds of a tree, serving during the winter as a depository for the turgid sap which the plant accumulated, and yielding it up again so soon as the flow of the sap has fully commenced in the spring. The sap which accumulates in the sugar maple *(acer saccharinis)* during the winter, contains a large portion of sugar in its composition; in the spring, as the watery sap imbibed by the roots ascends the stem, it gradually dissolves this sugar out from the heart-wood, and carries it up for the nourishment of the then swelling buds; of course, the higher the sap ascends the stem, the more of this sugar will it have dissolved; and this is the reason why it is found necessary, in tapping that tree for the purpose of obtaining sugar from its sap, that the openings should be made high up the stem, and not near the root; and further, that they should be made to enter the heart-wood, and not to pass through the bark alone. I know that these facts respecting the sugar maple have been adduced in support of the idea that there is no such thing as a downward flow of the sap, and that its elaboration instead of taking place in the leaves, takes place gradually during its ascent; but the downward flow of the sap is established by so many incontrovertible facts, that even if we could not give any explanation of this matter, we could by no means admit it as establishing the theory just adverted to.

A knowledge of the position of the sap at different seasons of the year, is of great importance to those engaged in cutting timber; and as all farmers are obliged to engage in this business more or less frequently, they will find this a matter well worthy of their attention. It is now, I believe, universally admitted that that disease so fatal to timber, the *dry rot*, arises from the presence of the sap, more especially of the thick turgid sap, which cannot be well removed by seasoning. If then such sap fills the tissues of the heart-wood during the winter, whilst they are free from it in the summer, we will at once see the bad policy of cutting timber in the winter, as is the common practice; and also a reason why the timber of the ancient Romans (who it is believed, usually cut their timber in the summer,) lasted so much longer than our timber at the present day. I do not know that I can place this subject fully before my readers in any better way, than by transcribing a part of a communication which appeared in the 34th vol. of the American Journal, written by Phineas Rainey, a ship-builder of Connecticut.

"It was the general custom here, to cut timber for vessels in the winter, notwithstanding they went into decay and wanted repairing in about seven years, or from that to eight, whilst a few only lasted twelve years. I ascribed this variation in their durability to the fact that the cutting of timber was often commenced in October, and then continued through the intermediate months to March. I therefore concluded that the right season was in December, when I supposed that the sap was certainly in the roots, and if cut at this season, I believed that it would leave the deadly poison in the stump, whilst the body and branches would be entirely free from its influence. I determined to carry this opinion into practice the first opportunity that occurred.

"In 1810 I was concerned in the building of a small freighting ship, of which I was the sole conductor, from her keel until she was completed and ready for sea. According to my previous determination, I commenced the cutting of the timbers for her in the early part of December, and continuing it into the first week in January. By so doing, I expected to produce the very best ship for durability on the Connecticut river, where there were then numerous vessels building. The timber selected was white oak and white chesnut.

The vessel advanced, and in April it was found that three of the quarter top timbers were wanting, and as very crooked pieces were required for these, I was obliged to go into the woods and have them cut. Sometime in May, it was found that the stick designed for plank-sheers (this was very large and intended to make the whole that was wanted,) would not answer the purpose, except that it was barely sufficient to go around the bows, the other part being badly rent, and of course rejected. I therefore went into the woods a second time, when the leaves were full grown and the bark would peel, and had two thrifty white oaks cut for the after pieces.—These timbers were put in immediately, and so were the plank-sheers, without any seasoning whatever, and the room between the timbers above the air-streak, was filled with salt, which was supposed to be a preventive against the dry rot. The workmanship was of the first order.

The vessel was launched and completed in July 1811. That autumn she went to sea, and after the declaration of war in 1812, she came to Middletown and was laid up until the peace of 1815. In that spring when she was to be fitted out again, it was found that she must be repaired in her hull; and on opening her, it was perceived that the dry rot had made such destruction among her timbers, that it was necessary to build her anew from her middle-wale up. But the three quarter timbers spoken of, which had been cut green, were sound, and appeared new, although their neighbors on each side of them were destroyed by the disease; and it is a remarkable fact, that the spikes when pulled out of them, were bright, and appeared new; but those parts of them which come in contact with the outside planks, (which were made from timber cut in December,) were badly oxidated, so much so that they were reduced in size about one quarter. The forward plank-sheers which it will be remembered were cut in December, were destroyed by the disease; but the after pieces were sound and dry, and on the under side appeared like new timber seasoned in the shade; and what is remarkable as to them is, that although some of the timbers on which they rested were so decayed that they might be picked to pieces, yet there was not the least appearance of it on them, which showed that although surrounded by corruption, they were themselves at least up to that period incorruptible. Thus it can be seen, as respects this vessel, that not only the season of the year, which in the popular opinion is the best to cut timber in for the purpose of making it last well, was strictly adhered to, but also the precautionary measure of applying salt, which is even at this day thought to retard the progress of the disease.

"Although at that time it was not thought neces-

sary ro repair this ship below the middle-wale, yet I have every reason to believe that the poison had begun its work in her timber from light-water mark to her top-side; for, in 1816 or 1817, in a perfect calm, she sank at sea, a poor, miserable decayed hull—a melancholy comment on the folly of cutting timber for vessels in the winter months. By inquiring since, I have always found that of those vessels which last the longest, the timber of which they were constructed was cut the farthest from December. When I have known the period at which certain trees have been cut, and also their locality, I have afterwards year after year examined their stumps, and watched their decay; and have invariably found that in those of them which were cut in the winter, the disease first made its appearance in the heart-wood, and continued its ravages until that was destroyed, and up to that period the alburnum was comparatively sound; whilst in those which were cut in the summer, the disease first made its appearance in the alburnum, which in a few years entirely disappeared, whilst the heart-wood remained sound.

"There are numerous facts in the most common transactions of life that will sustain me in my position. I believe that the general practice throughout the northern and middle States is, to peel such trees as are to be manufactured into ship-plank; by saving the bark, this probably makes the business more profitable than it would otherwise be.—It is invariably the case that by the time the plank has become thoroughly seasoned, the alburnum becomes so much injured by the dry rot as to be unfit to be used; and for my own part I never saw any timber of this sort, where the heart-wood was affected at all, unless the tree had evidently contracted the disease before its death. The season for peeling is from the third week in May to the second in June. Farmers cut their rails in the summer, when the bark will peel, and they last from fifty to a hundred years. They account for the fact in this way: if they cut them in the winter the bark will stick fast to the rails, and after a little while the water gets under it and causes them to decay sooner. On the contrary, they cut their posts in the winter; probably this is done for the convenience of cutting holes in them at that season; and although their rails last so long, yet their posts begin to decay in seven or eight years, according to the soil in which they are placed. When from necessity they are obliged to cut a few posts in the summer, (with the expectation, however, that they will soon decay) if they last thirty or forty years (and there are instances of this kind,) they speak of it as a very remarkable circumstance, but never inquire into the natural cause, nor alter their practice. There are other instances of the extraordinary longevity of timber; wooden abutments to bridges, pumps, piles, foundations of weirs, cofferdams, &c., a full notice of which would fill a volume—all going to show that there is a season in which if timber be cut, it will last for many years beyond the average time for which it now lasts; and that there is a season in which if it be cut, it will not last over eight or ten years, notwithstanding any artificial process through which it may be made to pass. In my opinion, June is the best time in which to cut timber, in order to make it last, though I do not suppose that it would make any great difference if it were cut in either of the other summer months.

"At the period at which I was strenuously advocating the doctrine of cutting timber in the winter, I had a small apple tree which had been engrafted with a choice fruit, and had been growing perhaps seven or eight years. There was one limb on it which I did not like, because it was growing in a wrong direction. I took it off in December, because I believed the sap to be then in the roots, and therefore at this season there would be none of it wasted or taken away with the limb, and of course the branches left would receive a greater portion of nourishment in the spring. Sometime afterward, I examined the tree, and found that the part or stump of the limb which remained within the surface of the body, was affected with the dry rot in its purest type. I removed this with my knife, and found that the disease had made its attack on the body of the tree itself. The tree, after the limb was taken off, became sickly, and its fruit after it began to bear was imperfect.

"I would here observe, that it is the common practice when people cut the timber of a house-frame, to do it in the winter, because, as they think, it will be more durable; but they will not trim their trees at that season, because they have learned from experience that if they do, the trees will contract the dry rot; therefore they do it in the spring. But Dr Ives, of New Haven, goes even further; he trims his trees in June, and thinks they do better at that season of the year, because the wounds heal quicker. This is right, for as the immediate cause of the disease is not contained in the heart-wood at that season, therefore the remaining stump being almost all heart-wood, can never be attacked by the disease, and the wound will heal quicker; but if the trimming be done in December, the cause of the disease is contained in the stumps at that season and as they cannot be removed, the consequence is, that the disease soon attacks and destroys them, and then the wound will never heal. Although trees thus situated may, by their abundant foliage, their extended branches and their smooth bodies, appear to be in perfect health, (which is sometimes the case,) yet they are doomed trees; for the canker having entered into their organization, is preying upon their very vitals, and will sooner or later, prostrate them in the dust."

In the communication from which the preceding statements have been taken, there are many other facts given, all going to establish the same point, viz., that timber should be cut and trees should be trimmed in the summer, and not in the winter, as is the common practice. I should remark, however, that these statements concern more especially such timber as the oak, chesnut, &c., and not those trees whose heart-wood is filled with resinous matter, such as the different species of pine; in the case of these last mentioned trees, I do not suppose that it will make much difference at what season they be cut. Perhaps it may be objected to cutting timber in the summer, that a farmer is generally so busy at that season, that he cannot spare the time necessary from his other occupations. But let it be recollected that it is not necessary that the timber should be fully prepared for its intended use at that season, but only cut down, or perhaps even girdling would do, if it be made sufficiently deep to kill the tree, and the work may then be left to be finished at a time of greater leisure. Should a farmer be obliged to hire this done, the expense incurred would be far more than repaid him, by the additional durability of the timber.—*Farmers' Register.*

CHOICE OF EMPLOYMENT.

At the present period of general derangement in almost every department of business, it is natural for all inquiring minds to cast their eyes around them in search of some pursuit calculated to yield them a support, or to advance their pecuniary resources. And where, let me ask, does the mind meet a certain response except from the productions of the soil? and where else can one look for stability as to the safety of his investments, and to an ample return for his labors? What other pursuit can offer to him a sure guarantee of a comfortable support for his family, and permanent provision for his children? In commercial pursuits all is chance and uncertainty, and he who can boast of being on the ascendant to-day can only claim to occupy the reverse position on the morrow. The history of whole streets in our mercantile cities is but a record of the rise and the downfall of their occupants. It is a melancholy reflection, that such are the uncertainties attendant on commerce, and on mercantile affairs generally, that every six or seven years witness a complete revolution in the mercantile class of the community. And yet such has been the folly and absence of proper discrimination among parents generally, that apparently it has been their most anxious desire to devote their sons to mercantile pursuits, and to risk their prosperity on chances as fluctuating and more uncertain than the turn of the die. It is to this gross misdirection of the mind that many branches of agriculture have to this day been totally neglected, although offering the most bountiful returns to those who would engage in them. Providence planted the vine alone in Persia, Syria, and North America. To France and Italy he tendered no such tribute. And yet we see France, whose climate was so uncongenial to the vine at its first introduction, that it could barely survive on its most southern shores, now become enriched beyond every other nation by the immense accumulation of wealth which, for ages, her vintage has poured into her bosom. We see that country becoming affluent and powerful, not from the natural productions of her own soil, but from those which she has borrowed from more favored climes. Look at her olive groves, and the whole race of oleaginous plants from which she derives the immense quantity of her choicest oils, sufficient, almost, for the consumption of the whole earth. Look at her groves of almonds, figs, prunes, and almost every other fruit calculated to give support to her citizens and amplitude to her commerce. And lastly, look at her immense and increasing plantations for the silk culture, rivaling in profit all her other pursuits. Not one of these invaluable productions is the gift of nature, but all exotics, transplanted to her soil. For ourselves we may claim both the vine and the mulberry as pre-eminently our own, and planted on our soil by the God of nature. And thus favored, shall Americans succumb and yield precedence to nations possessing few natural advantages? Shall we shrink from the development of these resources which Providence himself has marked out as peculiarly calculated to enrich our country and extend our sphere of comfort and happiness? We trust not. We trust that we shall not have, for the future, any recreants among us, who doubt the triumph of American skill, enterprise, and industry, where any other nation dare claim success. It is such men who retard the national advancement, and are a clog to its prosperity. They are worse than drones, for they impede the labors of the industrious.—*Silk Journal.*

NEW ENGLAND FARMER,
AND HORTICULTURAL REGISTER.

BOSTON, WEDNESDAY, FEBRUARY 5, 1840.

☞ We promised this week a report of Dr C. T. Jackson's remarks at the Second Agricultural Meeting; but for reasons which we trust will be satisfactory to our readers, we must beg for absolution. We have, with as much care as we could exercise, prepared full reports of Dr Jackson's remarks at the second and the third agricultural meetings, and of the remarks of Judge Hayes at the third agricultural meeting. But owing to the indispensable necessity of a portion of the paper going to press before these reports could possibly be prepared in a manner just and satisfactory to the speakers, to the public, and to ourselves, we could not insert either of them this week, without division or mutilation. To this, on various accounts, we are reluctant. They will, however, go on to the first pages of the next week's Farmer, and will, we have no doubt, be read with very great pleasure.

H. C.

THIRD AGRICULTURAL MEETING.

The Third Agricultural Meeting was held at the Representatives' Hall on Thursday, 30th January. In the absence of Mr Dodge, Mr Fowler, representative from Danvers, was appointed secretary of the meeting; Hon. D. P. King in the chair.

It was voted that gentlemen having questions relative to the subject of the evening's discussion, to which they desired an answer, should present them in writing to the secretary at the opening of the meeting. They should then be read, that the speakers might reply to them, if they found it convenient. It was understood, however, that this was by no means to preclude the offering of questions orally, which might grow out of the occasion, so that there should be no restraint upon free conversation and discussion.

It was also resolved that gentlemen from other States, who might happen to be present on the occasion, should be considered as members of the meeting, and invited to take part in the discussion.

The subject of the evening's discussion was Soils and Manures, continued from the last meeting; and the assembly was addressed at large by Dr C. T. Jackson, who recapitulated his former remarks and enlarged upon topics then briefly touched; and by Judge Hayes, of South Berwick, Me., a very intelligent and practical farmer, who happened to be present; and who was kind enough to respond to the call of the chair, and gratified and instructed the meeting by an account of his farming, and the improvements which he had effected. H. C.

A CARD.

We have received from some unknown friend at Halifax, a small parcel of Chevalier wheat, we suppose, grown there. He will please accept our thanks and be kind enough to add to the obligation by letting us know who he is and how we may serve him. We should be very glad likewise to know the history of this wheat. We hardly think we ever saw any product so fine; certainly we have never seen it surpassed. It is a winter wheat, and we shall seek to place it in hands which will give it a fair trial. It has been said that winter wheat frozen in water and so kept until spring, may be planted early in the spring, and will come to maturity the ensuing fall. We have no personal or certain knowledge of this process, but if any friend is disposed to take a portion of this sample and make this kind of experiment with it, it shall be at his service.

We are indebted to Mr Goddard, of Brookline, for a fine specimen of early corn, from seed which we gave him; and to Mr H. C. Merriam, of Tewksbury, for a fair sample of the Brown Corn, for which they will please accept our thanks.

We have likewise received from Dr Deane, of Greenfield, a splendid sample of raw silk, the product of his own industry and skill in raising and reeling. He has been honored by the American Institute for some of the same product with a silver medal. We only wish we had a gold one to give him, for he deserves it.

We are indebted likewise, to the Northampton Silk Company and to Mr Haskell, of Harvard, Mass., for some excellent specimens of sewing silk, which show that this beautiful cultivation and manufacture needs only to be undertaken to go on to perfection.

To David L. Child, Esq., likewise, we are indebted for some fine specimens of beet sugar, manufactured by him at Northampton, in a crude and refined state. They are equal to any sugars of the same description, and entirely free from the earthy, or as some would have it, the beet taste, which has been objected to in this product.

These productions will be exhibited to the farmers and others interested, at the agricultural meetings; and they have only to be seen to be admired.

HENRY COLMAN,
Commissioner of Agricultural Survey.

February 5, 1840.

THE FOURTH AGRICULTURAL MEETING

Will be holden at the Representatives' Hall on Thursday evening next at 7 o'clock. The subject proposed for discussion, and for that purpose committed to Mr William Clark, of Northampton and Mr Allen Putnam, of Danvers, both of the House, was Indian Corn; but as it was agreed, in case of the acceptance of the invitation given to Hon. Isaac Hill, of Concord, N. H., to address the meeting on that evening, (an answer to which had not then been received,) the subject for discussion will be the Improvement of the Agriculture of New England—on which subject, we have great pleasure in saying an address may be expected from this gentleman, the editor of that excellent journal, the Farmer's Monthly Visitor, and eminent for his agricultural zeal and intelligence.

We cannot doubt that there will be a full attendance on this occasion, and that those farmers of the Legislature who have failed to attend the two last meetings on account of the wet walking, having, we presume, brought nothing but pumps with them, will at once send home for their well-soled and well-greased cow-hide boots. We shall speak to the Sergeant-at-Arms to admit them, though having an extraordinary organ of order, he might have some little fears for his carpet.

We beg leave, likewise, to remind some of our friends, certainly, however, none of the Committee, that seven o'clock means precisely one hour after the Old South strikes one, two, three, four, five, six! and not that it is seven until eight; a principle absolutely immoral in itself, and which, if carried out into the various departments of life, completely tangles the web and throws every thing into disorder.

The committing of a subject to a committee, as mentioned above, is by no means intended to prevent or preclude discussion; but merely that the subject proposed might be particularly considered by the gentlemen to whom it was intrusted, so that when the meeting should be opened the discussion might proceed without delay, and with one at the team and one at the handles of the plough, there might be no difficulty in striking out the land, and going the first bout. H. C.

THE SLAYING OF THE DRAGON.

The Legislature have been occupied the last week in attempting to destroy a terrible dragon, called the License Law, which has been roaming over the State the last year, threatening to eat up the liberties of the people. The captain general of our armies, with the courage of a veteran of Waterloo, marched up boldly to the onset and gave him a fatal blow under his thickest scales. This was followed by a general rush of the bravest of both political parties to be in at the death. By the time the compositor has dropped the types from his fingers he will probably have uttered his last expiration. A few centuries hence, no doubt, the learned geologists of that period on exhuming his remains, will class him as a Megatherium or a Saurian, found in remote ancient formations; and some new Cuvier will arise to determine his genus and habits; and then there will be learned speculation among the philosophers and the gaping crowds, of how many living beings he must have devoured and how terribly he must have alarmed the poor women and children. As he is the only individual of the race that ever has, or probably ever will exist, there will be extreme difficulty in determining his place, and he will be regarded as constituting an entirely distinct class of the Carnivora. H. C.

CANKER WORM.—The Boston Courier recommends as a fit subject for discussion at the agricultural meetings in Boston, the best mode of destroying the grub or egg of the canker worm in the ground before it ascends the tree; and also suggests to the legislature the expediency of offering a liberal premium for the discovery of a remedy against its ravages. It is not probable that in the present state of the treasury, the latter suggestion will be adopted. Its object, however, would be accomplished, if some of the funds of our agricultural societies were devoted to this purpose. No more useful appropriation of a portion of their funds can be made.—*Worcester Ægis.*

We saw the notice in the Boston Courier referred to above, and were not regardless of the suggestion therein made to the Commissioner of Agricultural Survey. The natural history of the canker worm and his habits were fully investigated by Professor Wm. Dandridge Peck, in 1797, and his Essay, presented to the Massachusetts Agricultural Society at that time received a premium of fifty dollars. It was published in their memoirs, and we design soon to lay this and the Essay by the same gentleman, on the natural history of the slug worm before the readers of the New England Farmer. The Massachusetts Society have almost constantly from that time to this, offered a liberal premium for the discovery of any effectual mode to prevent the ravages of the canker worm; and we will answer for the trustees of that Society who have rendered immense services to the cause of an improved agriculture, that they will be ready at any time to reward with liberality such a discovery, whether it be or be not specified in their list of premiums.

We as yet know of but one effectual remedy against the canker worm, that is the encouragement of the birds. They are the best friends of the farmer and the gardener. In our code of penal justice, killing a small bird should be placed next to killing a child. We were assured the last summer, that at the beautifully cultivated district of Cambridge called 'Flob,' (have the name altered, we pray,) abounding in fruit, they were entirely free from canker worms, while in Old Cambridge the orchards suffered severely. The great security which they found was in the encouragement and preservation of the birds. A gunner in West Cambridge would be in as much danger as an abolitionist in South Carolina. H. C.

Massachusetts Horticultural Society.

EXHIBITION OF FRUITS.

Saturday, Feb. 1, 1840.

By S. Downer, Esq.; Catillac and Iron Pears—good specimens. Fine samples of the old Nonsuch, R. I. Greening, Newton Pippin and Royal or Old Pearmain Apples; and very superior specimens of the Golden Russet and Wales apples—the two last very beautiful, and richly deserve attention among cultivators of fine apples.

E. M. Richards, Esq. exhibited fine specimens of Pomme d' Api (Lady Apple) and L. Echassarri and Gloux Morceau Pears. For the Committee,

J. L. L. F. WARREN.

BRIGHTON MARKET.—Monday, Feb. 3, 1840.

Reported for the New England Farmer.

At Market 245 Beef Cattle, 1190 Sheep, and 70 Swine.

Prices.—*Beef Cattle.*—A small advance was effected and a yoke or two purchased on Saturday may have brought something more than our highest quotations. First quality, $6 75. Second quality, $6 00 a $6 50. Third quality, $5 00 a $5 75.

Barrelling Cattle.—Mess $5 50; No. 1 $5 00.

Cows and Calves.—$28, $33, $37 and $40.

Sheep.—The prices obtained last week were hardly sustained. Lots at $2 25, $3 00, $3 25, $3 75 and $4 75.

Swine.—A part of those at market were from the neighborhood. About 25 only were peddled from 4 1-2 to 6.

THERMOMETRICAL.

Reported for the New England Farmer.

Range of the Thermometer at the Garden of the proprietors of the New England Farmer, Brighton, Mass. in a shaded Northerly exposure, week ending February 2.

Feb., 1840.		7 A.M.	12, M.	5, P.M.	Wind.
Monday,	27	10	22	14	W.
Tuesday,	28	11	26	20	N. W.
Wednesday,	29	26	34	32	E.
Thursday,	30	32	35	34	E.
Friday,	31	26	28	23	W.
Saturday,	1	21	26	18	N. E.
Sunday,	2	5	24	18	E.

AGRICULTURAL BOOKS.

JOSEPH BRECK & CO. offer for sale a great variety of Agricultural books, among which are the following:

Loudon's Encyclopedia of Gardening.
" " of Plants.
" " of Agriculture.
" Suburban Gardener.
Forbe's Hortus Woburnensis.
Practical Agriculture, by David Low.
Chaptal's Agricultural Chemistry.
Hogg on the Cultivation of the Carnation and other Florists Flowers.
The Florist Cultivator.
Bridgeman's Gardeners' Assistant.
Fessenden's American Gardener.
" Complete Farmer.
Kenrick's Orchardist.
Manning's First Book of Fruits.
Sayers' Fruit Garden Companion.
" Flower Garden Companion.
Treatise on Sugar Beet, by David Lee Child.
American Swine Breeder.
Mowbray on Poultry.
Monography of the Genus Camellia.
Dennis' Silk Manual.
Cobb's do.
Kenrick's Silk Growers Guide.
Whitmarsh on the Mulberry Tree and Silk Worm.
American Farrier.
Parley's Cyclopedia of Botany—The Young Florist.
Weeks' Treatise on Bees.
February 5.

ELEMENTS OF PRACTICAL AGRICULTURE.

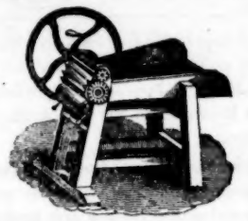
Just received, a supply of the Elements of Practical Agriculture, comprehendinng the cultivation of plants, the husbandry of domestic animals, and the economy of the farm. By David Low, Esq. F. R. S. E., Professor of Agriculture in the University of Edinburg. Second edition, with numerous engravings: 718 pp. London published. For sale by JOSEPH BRECK & CO., No. 51 and 52 North Market Street.
February 5.

FLOWER SEEDS—CHOICE VARIETIES.

JOSEPH BRECK & CO. have received a choice assortment of Flower Seeds from England and France, which, in addition to what have been raised under their own inspection, embrace the finest collection to be found in the country, including all the new Annuals, Biennials, and Perennials worthy of cultivation; neatly done up in papers at 6 1-4, 12 1-2, and 25 cents each. For sale at 51 and 52 North Market Street.
February 5.

SITUATION WANTED AS GARDENER,

By a married man with no incumbrance but his wife—one whose practical experience is known to the amateurs of this vicinity. Any commands addressed to Joseph Breck & Co. for M. I. will be promptly attended to.
Feb. 5.



GREEN'S PATENT STRAW CUTTER.

JOSEPH BRECK & CO. at the New England Agricultural Warehouse and Seed Store, Nos. 51 and 52 North Market Street, have for sale, Green's Patent Straw, Hay and Stalk Cutter, operating on a mechanical principle not before applied to any implement for this purpose. The most prominent effects of this application, and some of the consequent peculiarities of the machine are:

1. So great a reduction of the quantum of power requisite to use it, that the strength of a half grown boy is sufficient to work it very efficiently.

2. With even this moderate power, it easily cuts two bushels a minute, which is full twice as fast as has been claimed by any other machine even when worked by horse or steam power.

3. The knives, owing to the peculiar manner in which they cut, require sharpening less often than those of any other straw cutter.

4. The machine is simple in its construction, made and put together very strongly. It is therefore not so liable as the complicated machines in general use to get out of order.

VEGETABLE CUTTER.

Willis's New Improved Vegetable Cutter. This machine is calculated for cutting up vegetables and esculent roots for fodder, and is one of the most useful and economical machines that the farmer can use. The subscribers feel great confidence in recommending this machine to the public; they are aware that it has been long wanted and they now offer a machine that cannot fail to give satisfaction upon a fair trial. It will cut with ease from one to two bushels per minute, in the best possible manner, and is not liable to get out of order, being made in the most substantial manner. No farmer should be without one of them. For sale at the Agricultural Warehouse, 51 and 52 North Market Street.
December 18. JOSEPH BRECK & CO.

BONE MANURE.

The subscriber informs his friends and the public, that after ten years experience, he is fully convinced that ground bones form the most powerful stimulant that can be applied to the earth as a manure

He keeps constantly on hand a supply of Ground Bone, and solicits the patronage of the agricultural community. Price at the Mill 35 cents per bushel; put up in casks and delivered at any part of the city at 40 cents per bushel, and no charge for casks or carting

Also, ground Oyster Shells

Orders left at the Bone Mill, near Tremont road, in Roxbury, at the New England Agricultural Warehouse and Seed Store, No 52 North Market Street, or through the Post Office will meet with prompt attention

NAHUM WARD.

SCIONS OF FRUIT TREES FOR SALE.

The collection of fruits cultivated at the Pomological Garden consists of more than 1400 varieties of the Apple, Pear, Plum, Cherry and Peach. Scions of all those which have been proved are offered to nurserymen and others. Gentlemen wishing to send collections of American fruits to their friends in Europe can be furnished with most of those of first rate quality. They are warranted true to their names, and are in all cases cut from fruit bearing trees.
Salem, January 28, 1840. ROBERT MANNING.

AMERICAN SWINE BREEDER.

Just published and for sale by JOSEPH BRECK & CO. the American Swine Breeder; a Practical Treatise on the Selection, Rearing, and Fattening of Swine, by Henry W. Ellsworth: price 75 cents.
January 15.

FOR SALE.

An excellent Farm, pleasantly situated about 20 miles from the city, containing about 100 acres. For full description, particulars, &c. inquire at this office.

Also, a situation wanted by a man with a small family to carry on a farm.
January 30. 4w

WHOLESALE PRICES CURRENT.

CORRECTED WITH GREAT CARE, WEEKLY.

		From	To
Alum, American,	pound	5	5½
Ashes, Pearl, per 100 lbs.		5 75	5 87
Pot, " " "		5 12	5 25
Beans, white, Foreign,	bushel	1 62	2 00
" " Domestic,	"	2 00	2 00
Beef, mess,	barrel	14 00	14 50
No. 1.	"	12 00	12 50
prime,	"	10 00	10 50
Beeswax, white,	pound		
yellow,	"	28	35
Bristles, American,	"	35	70
Butter, shipping,	"	11	13
dairy,	"	17	20
Candles, mould,	"	13	14
dipped,	"		
sperm,	"	40	41
Cheese, new milk,	pound	10	
Cider,	dozen	1 50	1 75
refined,	barrel	2 50	4 50
Bone Manure,	bushel		35
in casks,	"		40
Feathers, northern, geese,	pound		
southern, geese,	"	37	46
Flax, (American)	"	9	12
Fish, Cod, Grand Bank,	quintal	2 62	2 75
Bay, Chaleur,	"	2 25	2 37
Haddock,	"	1 25	1 50
Mackerel, No. 1	barrel	12 25	12 50
No. 2,	"	10 25	10 50
No. 3,	"	6 00	6 25
Alewives, dry salted, No. 1.	"	5 00	5 28
Salmon, No. 1,	"	18 00	19 00
Flour, Genesee, cash,	"	7 00	7 25
Baltimore, Howard street,	"	6 87	7 00
Richmond canal,	"		6 37
Alexandria wharf,	"		6 87
Rye,	"		4 62
Meal, Indian, in bbls.	"	4 00	4 25
Grain: Corn, northern yellow,	bushel		85
southern flat, yellow,	"	73	75
white,	"	70	71
Rye, northern,	"	75	80
Barley,	"	75	80
Oats, northern, (prime)	"	45	48
southern,	"	38	43
Grindstones, pr ton of 2000 lbs. rough,		18 00	19 00
do. do. do. finished,		28 00	30 00
Hams, northern,	pound	9	10
southern and western,	"	7	8
Hay, best English, per ton,		16 00	18 00
Eastern screwed,		12 50	13 00
Hops, 1st quality,	pound	18	20
2d quality,	"	17	18
Lard, Boston,	"	10	11
southern,	"	9	10
Leather, Philadelphia city tannage,	"	29	30
do. country do.	"	25	27
Baltimore city tannage,	"	26	28
do. dry hides,	"	22	24
New York red, light,	"	21	23
Boston, do. slaughter,	"	21	22
Boston dry hides,	"	20	22
Lime, best sort,	cask	85	90
Molasses, New Orleans,	gallon	27	30
Sugar House,	"	50	55
Oil, Sperm, Spring,	"	1 10	
Winter,	"		1 15
Whale, refined,	"	50	55
Linseed, American,	"	70	75
Neat's Foot,	"	95	
Plaster Paris, per ton of 2200 lbs.		2 87	3 00
Pork, extra clear,	barrel	17 00	18 00
clear,	"	16 00	17 00
Mess,	"	14 00	15 00
Prime,	"	12 00	13 00
Whole Hogs,	pound	5	6
Seeds: Herd's Grass,	bushel	2 50	3 00
Red Top, southern,	"	80	1 00
northern,	"		1 50
Canary,	"	2 25	2 50
Hemp,	"	2 25	2 50
Flax,	"	1 37	1 62
Red Clover, northern,	pound		
Southern Clover, none,	"		
Soap, American, Brown,	"	5	7
" Castile,	"	12	13
Tallow, tried,	"	11	12
Teazles, 1st sort,	pr M.	2 50	3 00
Wool, prime, or Saxony Fleeces,	pound		
American, full blood, washed,	"		
do. 3-4ths do.	"		
do. 1-2 do.	"		
do. 1-4 and common,	"		
Northern pulled. Pulled superfine,	"		
No. 1,	"		
No. 2,	"		
No. 3,	"		

MISCELLANEOUS.

JUDICIAL ANECDOTE.

The courts of Vermont have been celebrated for many years for the wit and amusing peculiarities of several of their justices. Anecdotes are rife respecting them, from the rough and coarse humor of Harringtou, to the more polished scintillations of his successors of modern times. Nothing can be more racy than the following, which we are confident is new to the majority of our readers.

Judge ——— had effected a settlement of accounts with one of his neighbors, a very parsimonious man, and it was found impossible to make correct change within *three cents*, which the judge said he would hand to the other at any subsequent period. Some days after, while the judge was upon the bench, and in the midst of a cause, the avaricious neighbor, whose brains could not rest while the three cents were absent from his pocket, appeared in the court room, and with slight ceremony, beckoned to his debtor to grant him an interview. The judge, who was so unfortunate as to stutter somewhat, appreciated instantly the purpose of the applicant, and arrested the progress of the case, with "st-stop, a f-f-few moments, unt-until I speak t-t-t-to my neighbor P——." He thereupon descended from the bench, and accompanied neighbor P. to a private room, and, as he expected, received a demand for the delinquent three cents. He paid it, obtained a receipt, and returned to the court room, convulsing every one present with laughter, by the following remark; "th-they s-say, th-that at t-t-the m-m-m-moment any one d-d-dies, another is b-born, and the s-soul of t-th-the one that d-dies goes into the b-body of th-the one th-that's born. N-now, w-when neighbor P. w-was b-born, *n-n-nobody died.*"—*Ladies' Companion.*

CAPTURE OF A BEAR.

For the last twelve years, there has been residing within forty minutes ride of this city, in the town of Brewer, near the "Big Pond," so called, a mischievous animal called a bear, of the hog species, with a brown proboscis, and short, but strongly sinewed legs; during which time, he has fattened upon the corn, cattle and sheep of the farmers who lived in his vicinity. During the past year alone, he has destroyed upwards of one hundred dollars worth of stock, always taking care to secure his retreat when pursued, till within a few days, when he was accidentally discovered by some men who were employed in logging near the spot where he had taken quarters for the winter. Observing his tracks in the snow, they traced him to the mouth of his den, which was in the cavity of a ledge; when they commenced removing the brush he had carefully drawn into its mouth.

In a moment old Bruin began to snuff and growl, and made an attempt to take leg bail, but was saluted with a blow from a cudgel, cut for the purpose, and fell back into his domicil, where he quivered for a few moments, but suddenly regained his strength, and made good his escape for the time being. The next day he was hotly pursued by some half dozen of those on whose stock he had preyed, and the chase was continued for some five or six days, when Mr Blood came to this city and informed some of our sportsmen (we have some old ones too,) who, accompanied by their hounds, immediately joined in the chase, and fifteen days from the time the bear was first started from his den by the loggers, (during the whole of which time he was hotly pursued by men and dogs, having been kept on the tramp the whole time, only excepting nights) he was captured and brought into this city by Capt. Nye, and Mr Leonard Dow.

On examining him, thirteen balls were found to have pierced him; the last shots, however, were those which gave him his *quietus*—one of which took effect a little abaft his fore shoulders, and the other near his spine. During the whole fifteen days, Mr Blood, who is a farmer, kept open house, keeping all of those free of expense who were disposed to join in the chase, being determined to have the bear before he gave up. He weighed when killed, three hundred and twenty-four pounds. The old hunters say he must have "run off" one hundred pounds during the chase—but still he is a lusty fellow, and you Bostonians may prepare your mouths for a taste of his flesh, as I understand it is the intention of Mr Dow to ship him at Frankfort for your city. He has been on exhibition in this city for the last two days, at 12 1-2 cents a sight.—*Bangor Democrat, Jan.* 12.

GREAT WALL OF CHINA.

Even when united under one emperor, China trembled at the Tartars of the desert. About two centuries before the birth of Christ, She-hwang-te (the book-burner,) constructed the great wall of China, to prevent their incursions. The wall, which has always been considered one of the world's wonders, is 1500 miles in length, of great height and thickness, furnished with fortresses and towers innumerable, and is carried with singular skill over mountains and rivers, as well as across the plains and valleys. Lord Macartney exclaimed on seeing it that it was certainly the most stupendous work of human hands, and he rationally concluded that at the remote period of its building, China must have been a very powerful and civilized empire. Dr Johnson was accustomed to say of it, that it would be an honor to any man to say that his grandfather had seen the great wall of China. Mr Barrow who saw it with Macartney, went into some amusing calculations as to the quantity of the materials it contains. According to his account, all the materials of all the dwelling houses of England and Scotland, supposing them at that period (at the end of the last century) to amount to 1,800,000, and to average 2,000 cubic feet of brick work or masonry, would be barely equivalent to the bulk of the wall, without taking in its fortresses or towers, which he calculated contained as much masonry and brick work as London did at that time. Stupendous as was the work, it failed in its object.

A Swedish peasant spoke contemptuously of the King, saying —"I don't care a *fig* for Bernadotte." The peasant was arrested, and under an ancient law of the kingdom, condemned to death. The King immediately pardoned the peasant, and ordered the law to be repealed. "But," said the King to the Judge, "I do not like to be insulted, and therefore I cannot let this man pass off without some punishment; you will therefore please to go to his house and say to him in my name—Since you don't care a fig for Bernadotte, Bernadotte don't care a fig for you."

The number of lives lost by shipwreck of American vessels last year is stated at 537.

FAITHFULNESS OF A DOG.

In the unhappy and too memorable winter of 1790, when the corn, the vine, and the olive, were destroyed by severe cold in France, the wolves made dreadful ravages in the fields, and rushed with verocity even upon man. One of these ravenous beasts, after having broken the window, entered a cottage in the forest of Orte, near Angouleme. Two children, one six, the other eight years of age, were reposing on the bed, in the absence of their mother, who had gone in search of wood to kindle a fire. Meeting with no resistance, the wolf leaped upon the bed, and sought to destroy his delicate prey. Seized with a sudden fright, the two little boys crept quickly under the covering, and held it closely without drawing a breath. So near was the flesh which had enticed him, that not being able to attain it instantly, the murderous animal became more furious, and began to destroy the covering with his teeth. Trifling as was this obstacle, it nevertheless preserved the lives of these innocent children. A large and faithful dog, who had followed their mother, returned in time to deliver them; he had scented the track of the wolf at more than a hundred yards from the house, whither the mother was returning slowly, loaded with faggots; he ran with the quickness of the stag—he entered like a lion, and falling upon the animal, who had endeavored to secrete himself in an obscure corner, he seized the base wretch by the throat, and dragging him to the door, strangled him instantly. The alarm of the mother on her return was indescribable. She beheld the wolf stretched upon the earth, the dog covered with blood, her bed in confusion, her children gone. Observing the distress of his mistress, the dog ran towards her with the most energetic solicitude, then returning to the bed he thrust his head repeatedly under the covering, and by the most expressive signs endeavored to intimate to her that she would find there that which she held most dear. The mother approached, and extending her trembling hand, discovered that her children were there, although deprived of motion; she hastened to restore them—there was yet time; a moment's delay would have rendered the attempt useless. When they had recovered their senses, they plainly recounted the danger to which they had been exposed, the manner in which the wolf had entered, and their wonderful preservation. The faithful animal, pleased in having saved the lives of these little innocents, by his eager caresses gave ample testimony that his joy was equal to that of his mistress.

A MAN WANTED.

To do the work on a small place, a few miles from the city. He must understand the cultivation of vegetables, fruits, &c., and the care of horse, cows, &c. A single man, from 20 to 30 years of age, of steady and industrious habits, may inquire at this office. J. B. I.

January 15.

ROHAN POTATOES,

For sale at the New England Agricultural Warehouse and Seed Store, No. 52 North Market Street, at $5 per barrel.

October 16. JOSEPH BRECK & CO.

THE NEW ENGLAND FARMER

Is published every Wednesday Evening, at $3 per annum payable at the end of the year—but those who pay within sixty days from the time of subscribing are entitled to a reduction of 50 cents.

TUTTLE, DENNETT AND CHISHOLM, PRINTERS

17 SCHOOL STREET....BOSTON